

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims (1-15) Canceled

Claim 16 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first

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surface, and is connected externally, and an interposer which electrically connects said first connection terminal with said second connection terminal, wherein said contact portion has a thickness and a hardness such that said contact portion can break an oxide film formed on said respective one of said spherical connection terminals.

Claim 17 (Canceled)

Claim 18 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first

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connection terminal with said second connection terminal, wherein a projection, which comes into contact with said contact portion, is formed in said opening, a certain portion of said contact portion being moved when said respective one of said spherical connection terminals is connected with said contact portion, which certain portion is a portion extending from a position to the extending end of said contact portion, at which position said contact portion is supported by said projection.

Claim 19 (Original): The semiconductor testing device as claimed in claim 18, wherein said projection is made of an elastic material.

Claim 20 (Original): The semiconductor testing device as claimed in claim 18, wherein projections made of a conductive material.

Claim 21 (Original): The semiconductor testing device as claimed in claim 18, wherein said projection has a spherical shape.

Claim 22 (Original): The semiconductor testing device as claimed in claim 18, wherein said projection has a ring shape.

Claim 23 (Canceled)

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Claim 24 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first connection terminal with said second connection terminal, wherein a roughened surface is formed on at least one of a surface of said contact portion, with which surface said respective one of said spherical connection terminals comes into contact, and an area of said contact portion, which area comes into contact with said first connection terminal.

Claim 25 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

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a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first connection terminal with said second connection terminal, wherein a roughened surface is formed on at least a portion of said first connection terminal, with which portion said contact portion comes into contact.

Claim 26 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection

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portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first connection terminal with said second connection terminal, wherein a positioning arrangement is provided for positioning said contactor with respect to said wiring substrate when said contactor is loaded on said wiring substrate.

Claim 27 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

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a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first connection terminal with said second connection terminal, wherein said contactor is provided with a non-connection portion at which it is not necessary to electrically connect one of said spherical connection terminals with said contactor, at which non-connection portion an opening is provided but a contact portion is not provided.

Claim 28 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring

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substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first connection terminal with said second connection terminal, wherein the direction in which said contact portion extends is set based on the directions of relative displacement occurring between said respective one of said spherical connection terminals and said contact portion due to a difference in thermal expansion between said contactor and said semiconductor device.

Claim 29 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on

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which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first connection terminal with said second connection terminal, wherein an opening is formed in said contact portion at a position at which said respective one of said spherical connection terminals comes into contact with said contact portion.

Claim 30 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first

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connection terminal with said second connection terminal, wherein said wiring substrate comprises a multi-layer substrate.

Claim 31 (Previously Presented): A semiconductor testing device, which is used for performing a test on a semiconductor device having spherical connection terminals, comprising:

a contactor, provided with a single layer of insulating substrate, in which substrate an opening is formed at a position corresponding to a respective one of said spherical connection terminals, said contactor also being provided with a contact portion, which includes a connection portion with which said respective one of said spherical connection terminals is electrically connected, said contact portion being provided on said single layer of insulating substrate so that said connection portion is located on said opening; and

a wiring substrate, on which said contactor is mounted in a manner which permits installation and removal of said contactor onto and from said wiring substrate, said wiring substrate being provided with a first connection terminal which is provided on a first surface, on which said contactor is mounted, and is electrically connected with said contact portion, a second connection terminal which is provided on a second surface, which is opposite to said first surface, and is connected externally, and an interposer which electrically connects said first connection terminal with said second connection terminal, wherein said insulating substrate comprises a flexible film made of resin and having the property of insulation, and said contact portion comprises a conductive metal layer having flexibility.

Claim 32 (Canceled)